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(54) **GAS TURBINE ENGINE EXHAUST FLUID  
PASSAGE DUCT**

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#### Related U.S. Application Data

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(58) **Field of Classification Search**

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See application file for complete search history.

(57)

#### ABSTRACT

A fluid plenum including a body defining an internal cavity having an inlet and an outlet. The fluid plenum further includes at least one wall positioned in the internal cavity that divides the internal cavity into first and second passageways, and which also divides the inlet into first and second inlet portions, and divides the outlet into first and second outlet portions. The first passageway receives fluid through the first inlet portion and directs fluid to the first outlet portion, and the second passageway receives fluid through the second inlet portion and directs fluid to the second outlet portion. The first and second passageways extend first and second lengths that are different from one another, and also generate a substantially common back-pressure at the first and second inlet portions during flow of a fluid stream through the inlet, including a first sub-stream of the fluid stream through the first passageway and a second sub-stream of the fluid stream through the second passageway.

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**13 Claims, 11 Drawing Sheets**

